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EXAMINER
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OLSON, JASON C

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



## DETAILED ACTION

### *Drawings*

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 9, 11-17, 20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlson et al. (US PUB 2004/0056568), hereafter "Carlson".

Regarding claim 1, Carlson teaches at least one tape drive tray (see para. [0038] and figures 3-7, the elevator 100 is a tape drive tray); an intelligence module within the at least one tape drive tray (see para. [0040] and figures 6-7; item 140 is an intelligence module), said

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intelligence module having electronics to control and monitor tape drive tray functions in the storage library (see para. [0040], para. [0047], ln. 7-11 and figure 9, the elevator control 142 controls and monitors the tape drive tray); and a main library controller interfaced to the intelligence module (see figure 9, the library system controller 150 is interfaced with the intelligence module containing the elevator controller 142), wherein the intelligence module sends tape drive tray function data to the main library controller (see para. [0048]).

Regarding claim 2, Carlson teaches the intelligence module interface includes a tape transport interface port (see para. [0039]-[0040] and figures 5-7, the intelligence module 140 is interfaced with the transport bin 130 of elevator 100).

Regarding claims 3 and 4, Carlson teaches the tape drive tray function data is sent via a wireless connection and the wireless connection includes at least one a radio frequency or infrared transmission (see para. [0041]).

Regarding claim 5, Carlson teaches wherein the main library controller transmits commands to be performed on the tape drive tray by the intelligence module (see para. [0047]).

Regarding claim 6, Carlson teaches positive or negative acknowledgment of the commands is sent back to the main library controller after the commands are received by the intelligence module (see para. [0048], to provide necessary communication positive or negative acknowledgement of the commands is sent back to the library controller).

Regarding claim 9, Carlson teaches the tape drive tray includes at least one of a tape drive, a power supply, a fan, a temperature sensor, and a fault indicator light, each interfaced to the intelligence module (see figure 9; the elevator controller 142 contained in the intelligence module is interfaced with a power supply 160 and 162).

Regarding claim 11, Carlson teaches the tape drive tray function data is gathered by periodically sampling status signals from the tape drive tray (see para. [0040]; the tape drive tray samples cartridge information such as the bar codes).

Regarding claims 12-17, 20, and 22: method claims 12-17, 20, and 22 are drawn to the method of using the corresponding apparatus claimed in claims 1-6, 9, and 11. Therefore method claims 12-17, 20, and 22 correspond to apparatus claims 1-6, 9, and 11 and are rejected for the same reasons of anticipation as used above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 10, 18, 19, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson and Armagost et al. (US PUB 2005/0057847), hereafter "Armagost".

Regarding claims 7, 8, and 10, Carlson teaches that the library controller and the intelligence module transmits commands and function information back and forth, but fails to teach the commands are transmitted in a serial format; the intelligence module decodes the serially formatted command into discrete signals corresponding to a specific tape drive tray interface; and the functional information is sent back in a serial format. However, Armagost is relied upon to teach transmitting commands in a serial format, decoding the commands and transmitting functional information back in serial format (see para. [0322] and figure 51D; the

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communication between the magazine drive connector 1514 (which receives commands from the library controller) and the drive 1602 is done through a serial to parallel converter 1598 (decoder); the drive together with the converter constitute and intelligence module). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the communication between the library controller and the intelligence module of Carlson by applying the teaching of communicating data in a serial format as taught by Armagost for the purpose of reduce the number of pads associated with the drive connector as described by Armagost in paragraph [0322], lines 1-6.

Regarding claims 18, 19, and 20: method claims 18, 19, and 20 are drawn to the method of using the corresponding apparatus claimed in claims 7, 8, and 10. Therefore method claims 18, 19, and 20 correspond to apparatus claims 7, 8, and 10 and are rejected for the same reasons of obviousness as used above.

Regarding claims 23 and 25, Carlson teaches transmitting data from a tape drive tray to a main library controller, wherein the data to be transmitted is gathered by an intelligence module within the tape drive tray (see para. [0048], comprising: periodically sampling status information generated from devices within the tape drive tray; and sending the status information to main library controller (see para. [0040]; the tape drive tray samples cartridge information such as the bar codes); transmitting control data to the tape drive tray (see para. [0047]); receiving the control data at the tape drive tray (see para. [0048]); and using the intelligence module to drive discrete signal lines to a state as specified in the control data (see para. [0047]). Carlson fails to teach that the commands are transmitted in a serial format; the intelligence module decodes the serially formatted command; and the functional information is sent back in a serial format.

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However, Armagost is relied upon to teach transmitting commands in a serial format, decoding the commands and transmitting functional information back in serial format (see para. [0322] and figure 51D; the communication between the magazine drive connector 1514 (which receives commands from the library controller) and the drive 1602 is done through a serial to parallel converter 1598 (decoder); the drive together with the converter constitute and intelligence module). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the communication between the library controller and the intelligence module of Carlson by applying the teaching of communicating data in a serial format as taught by Armagost for the purpose as stated above.

Regarding claim 24, the combination of Carlson and Armagost teaches generating status information including at least one of a tape drive, a power supply, a fan, a temperature sensor, and a fault indicator light (see para. [0048] and figure 9 of Carlson; the elevator controller 142 contained in the intelligence module is interfaced with a power supply 160 and 162).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

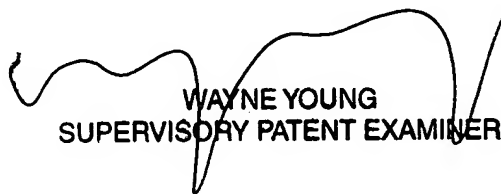
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JCO  
August 16, 2006



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SUPERVISORY PATENT EXAMINER